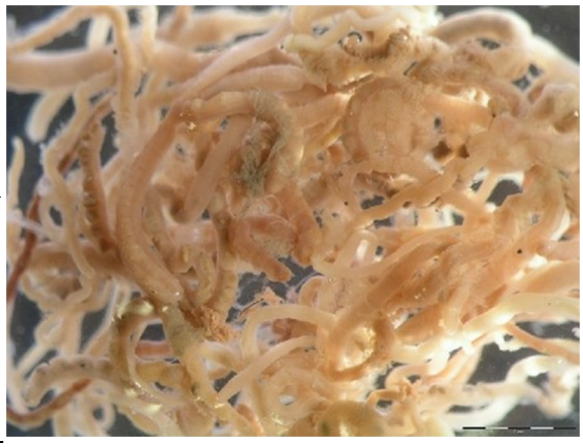
Heteromastus filiformis

Capitellid worm



Threat scores

1. Ecological impact
    - True deposit feeder, toxins and other pollutants such as DDT tend to bio-accumulate within their body tissues
    - These toxins are then incorporated into the aquatic food chain through release of fecal pellets at the sediment surface
    - Polychaetes can contain up to 40 times more DDT in their bodies than is present in the surrounding sediment transferring high concentrations of toxins to the next trophic level of the marine food chain
    - Displaces native worms by competing for resources and space
    - Feeding behavior results in the intensive reworking of the sediment which can indirectly influence the composition of the benthos, the physical and chemical properties of the sediment, and rate of organic matter mineralization
    - Deposit feeders also strongly influence the sediment's water content, porosity and compaction properties
    - Pharyngeal secretions (from the pharynx) that may promote bacterial growth, thereby enhancing organic coatings on sediment particles in the feeding tubes
2. Invasive potential
    - Hatched larvae may be transported by tidal currents
3. Geographic extent
    - Locally patchy
4. Management Difficulty
    - No known controls in marine environment
    - Hull cleaning and ballast treatment can prevent further introductions

Geography and Habitat

1. Native: Atlantic Coast, South Africa, New Zealand, Australia
2. Introduced: Pacific Coast from Alaska to California
3. Habitats
    - Marine, estuaries/bays, intertidal zones
    - Can be found in muddy sand areas from the shoreline to shallow marine waters, thrives in polluted waters

Invasion Pathways

1. Ballast water and sediments
2. Stocking in open water - oyster industry
3. Natural spread - water currents

Non-Native Locations

1. 54- Gulf of Alaska
2. 56- Puget Trough/Georgia Basin
3. 57- OR, WA, Vancouver
4. 58- Northern California

Sources

1. Molnar, Jennifer, et al. 2008. “Assessing the global threat of invasive species to marine biodiversity.” *Frontiers in Ecology and the Environment*. 6 (9), pp. 485-492.
2. http://conserveonline.org/workspaces/global.invasive.assessment
3. http://content5.eol.org/content/2010/01/12/11/98235_large.jpg